



Writing and Reviewing for Medical Journals

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Outline

- Purpose of peer review
- Link between writing and reviewing
- Dual role of reviewer
- Reviewer responsibilities
- Format of reviews
- Reasons reviewers accept & reject manuscripts
- Advice for authors

Purpose of Peer Review

To ensure:

1. No mistakes in procedure or logic
2. Results support conclusion
3. No citation errors
4. Adherence to ethics protocols and approval by institutional review committees
5. Work is “original and significant” (p. 48)

Good Reviewers, Great Authors

- By knowing what reviewers look for, authors can prospectively address questions reviewers are likely to ask
 - The more reviewing you do, the more comfortable you will become as an author

Dual Role of the Reviewer

Author advocate

- to see what the authors have not seen
“If a reviewer acts as an ‘author advocate,’ then many potential problems that may arise during the peer review process will be avoided.” (p. 48, italics added)

Journal advocate

- ensure “best possible science” becomes part of the permanent record (p. 48)

Dual Role of the Reviewer

To provide feedback that is:

a) helpful to editors → judge whether manuscript merits publication by providing global rating

b) instructive for authors → provide constructive criticism for author, regardless of whether manuscript deemed acceptable for publication
(p. 92)

Reviewer Responsibilities

1. Provide honest, critical assessment of the research
2. Maintain confidentiality about the existence and substance of the manuscript
3. Must not participate in plagiarism
4. Avoid, or disclose, any conflicts of interest
5. Accept manuscripts for review only in his/her areas of expertise

Reviewer Responsibilities

6. Agree to review only those manuscripts that can be completed on time
7. Report suspected duplicate publication, fraud, plagiarism, or ethical concerns about use of animals or humans in research being reported
8. Write reviews in collegial, constructive manner (p. 49-50)

Golden Rule

“Treat all manuscripts in the same manner that you would want your own treated.” (p. 48)

Golden Rule

- Provide a critique that is positive, critical yet objective, balanced
- Avoid personally offensive comments, sarcasm
- Indicate precisely what the problems are and how they may be overcome
- Complete and return promptly

→ “A confusing or uninformative critique is not helpful either to the authors or to the editor.”
(p.48)

Format of Review

Two parts to a review:

1. Substantive evaluation
2. Recommendation
 - Accept
 - Accept pending revisions
 - Reconsider after major revisions
 - Reject

Informative Review

Shows that the reviewer:

- Performed a close reading of the manuscript
- Thought carefully about the most important sections of the manuscript
- Provided constructive criticisms for the authors
- Assigned a rating that is commensurate with the remainder of the review (p. 97)

Non-Informative Reviews

The “snapshot verdict”

- Indicates only that the reviewer has read the manuscript and whether or not he/she liked it (p. 97)

Example

*“I read the manuscript on renal calculi that you sent me. I found no problems with it. I think it is the first time that this work has been done. This manuscript should be published.
Recommendation: Accept.”*

Non-Informative Reviews

The “mixed-signals review”

- Narrative summary leads to one conclusion, but reviewer provides a Recommendation counter to the expected one (p. 97)

Example

“This manuscript has a number of major shortcomings: The authors have not adequately reviewed the medical literature on renal calculi, they provide insufficient detail regarding how patients were chosen for the study, and the Results section has many inconsistencies. Recommendation: Accept Pending Revisions.”

Non-Informative Reviews

The “hidden-agenda review“

- Opinions in the confidential note to the editor substantially differ from those expressed in the portion of the review available to the authors (p. 97-98)

Example

“This study is a good comparison between conventional CT and 16-MDCT for evaluation of renal calculi. The manuscript could be improved by better documentation of the previous medical literature, a clearer explanation of how readers scored the images and of the selection criteria, clarification of some inconsistencies between the stated results and Table 1, and a better explanation of how the CT scan parameters affect the sensitivity of MDCT. Recommendation: Accept Pending Revisions.

Confidential Note to the Editor: There are some serious flaws here. The authors show a lack of understanding of the factors that come into play in renal calculus detection by CT. The Methods section needs a lot of work.”

Reasons Reviewers Accept Manuscripts

- Timely and relevant to a current problem
- Well written, logical, and easy to comprehend
- Study well designed and had appropriate methodology (p. 93)

Reasons Reviewers Reject Manuscripts

- Incomplete or insufficiently described statistics
- Overinterpretation of the results
- Suboptimal or insufficiently described means of measuring data
- Sample population too small or biased*
- Text difficult to follow
- Insufficient problem statement (p. 93)

Provenzale, J.M., & Stanley, R.J. (2006). A systematic guide to reviewing a manuscript. *Journal of Nuclear Medicine Technology*, 34(2): 92-99. Originally published in *American Journal of Roentgenology*, 2005.

Advice for Authors

- Authors shouldn't feel as though they are at the mercy of reviewers
- Editor makes decision, not reviewers
- If you feel a reviewer has given biased or unjustified comments, don't be afraid to present your argument to the editor

Resources

Budgell, Brian S. (2009). Writing a biomedical research paper: A guide to structure and style. Tokyo, New York: Springer.

Buenos, D.J., Kirk, K.L., & Hall, J.E. (2003). How to review a paper. *Advan Physiol Educ* 27:47-52, 2003.
doi:10.1152/advan.00057.2002

Provenzale, J.M., & Stanley, R.J. (2006). A systematic guide to reviewing a manuscript. *Journal of Nuclear Medicine Technology*, 34(2): 92-99. Originally published in *American Journal of Roentgenology*, 2005.